

Amendments to the Claims:

Please amend the claims as indicated, with insertions shown by underlining and deletions by strike-through.

Claims 1-112. Canceled.

Claim 113. (currently amended) An isolated polynucleotide encoding a humanized or chimeric monoclonal antibody (mAb) or an antigen binding fragment thereof comprising:

a light chain variable region of a monoclonal antibody (mAb) or antigen binding fragment thereof comprising complementarity-determining regions (CDRs) comprising CDR1 (amino acids 24-40 of SEQ ID NO:2), CDR2 (amino acids 56 to 62 of SEQ ID NO:2) and CDR3 (amino acids 95 to 102 of SEQ ID NO:2) of the light chain of the LL2 mAb; and further comprising:

a heavy chain variable region of a monoclonal antibody (mAb) or antigen binding fragment thereof comprising complementarity-determining regions (CDRs) comprising CDR1 (amino acids 31 to 35 of SEQ ID NO:4), CDR2 (amino acids 50 to 66 of SEQ ID NO:4) and CDR3 (the amino acid sequence 99 to 105 of SEQ ID NO:4) of the heavy chain of the LL2 mAb; and

framework regions (FRs) of light and heavy chain variable regions of one or more human antibodies.

Claims 114-149. Canceled.

150. (New) The isolated polynucleotide of claim 113, wherein said FRs further comprise at least one amino acid substitution.

151. (New) The isolated polynucleotide of claim 150, wherein said substituted amino acid in said FRs is an amino acid identified as a potential CDR contact affecting the affinity and specificity of the encoded mAb to the CD22 antigen.

152. (New) The isolated polynucleotide of claim 151, wherein said substituted amino acid is the same amino acid as the corresponding amino acid from the murine LL2 mAb from which the CDRs were obtained.

153. (New) The isolated polynucleotide of claim 151,

wherein said FRs of the light chain variable region comprise at least one FR selected from the group consisting of amino acids 1-23 of SEQ ID NO:6, amino acids 41-55 of SEQ ID NO:6, amino acids 63-94 of SEQ ID NO:6 and amino acids 103-113 of SEQ ID NO:6; and

wherein said FRs of the heavy chain variable region comprise at least one FR selected from the group consisting of amino acids 1-30 of SEQ ID NO:8 or SEQ ID NO:9, amino acids 36-49 of SEQ ID NO:8 or SEQ ID NO:9, amino acids 67-98 of SEQ ID NO:8 or SEQ ID NO:9 and amino acids 106-116 of SEQ ID NO:8 or SEQ ID NO:9.

154. (New) The isolated polynucleotide of claim 113, wherein said fragments are selected from the group consisting of F(ab')₂, Fab', Fab, and Fv.

155. (New) A mammalian expression vector comprising the polynucleotide of claim 113.

156. (New) A mammalian expression cell comprising the polynucleotide of claim 113.